

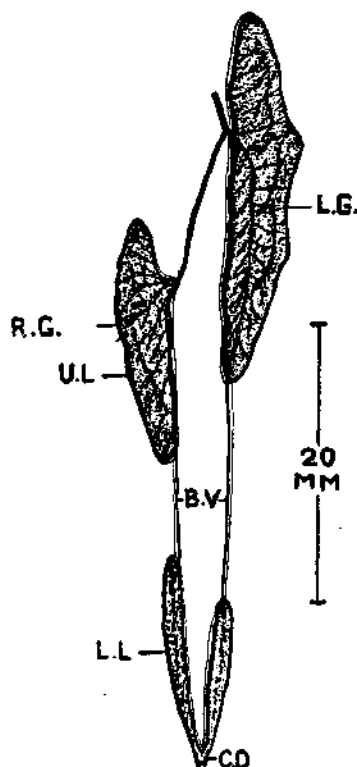
ON AN UNUSUAL OVARY OF THE INDIAN OIL SARDINE
SARDINELLA LONGICEPS VAL.

On 19th April 1962, while examining a sample of oil sardine caught by cast net at Ullal, an unusual development of the ovary was observed in a fish measuring 174 mm (total length). It did not differ either in external features or in internal anatomy from that of a normal one except in the development and disposition of gonads as shown in figure. Raju (1960) has described the occurrence of ovary with divided lobes and other gonadal abnormalities in the oceanic skipjack, *Katsuwonus pelamis* (L.) from the Laccadive Sea. An instance of hermaphroditism as an abnormal phenomenon in oil sardine (Antony Raja 1963) and also in other fishes has been recorded (Prabhu and Antony Raja 1959, Nayak 1959, Ramamohana Rao 1962 and Thomas and Raju 1962) from the Indian waters. Bensam (1964) has described a few instances of gonadal abnormalities met with in the oil sardine.

In the present case, the right gonad has two lobes, the upper one being larger than the lower and these are joined together by the connective tissues in which the blood vessel is prominent. The two lobes are attached to the body wall by mesovarium. The left gonad is also similar in appearance. The oviducts from the

two lower lobes unite to form a common duct posteriorly and it opens to the outside. Detailed measurements are given below :

	Right gonad	Left gonad
Length of upper lobe	16.0 mm.	25.0 mm.
Breadth of upper lobe	4.0 mm.	4.1 mm.
Length of lower lobe	14.0 mm.	10.0 mm.
Breadth of lower lobe	1.5 mm.	1.5 mm.
Distance between two lobes	7.0 mm.	15.0 mm.



Ventral view of the ovary of oil sardine with divided lobes.

B.V. blood vessel, C.D. common duct,
L.L. lower lobe, L.G. left gonad,
R.G. right gonad U.L. upper lobe.

The fish was in stage II of maturity. There were no ova measuring more than 0.1 mm. in any of the lobes. There was also no significant difference in the size of ova of the four lobes.

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